



**City of Tigard Comprehensive Plan**

**Environmental Quality Policy Interest Team**

**June 27, 2007**

**7:00 – 9:00 pm**

**Agenda for Meeting #2**

7:00 – 7:10	Welcome Meeting Objectives Introductions Roles and Responsibilities	Darren Wyss  All
7:10 – 7:20	Comprehensive Planning Overview <ul style="list-style-type: none"><li>- schedule</li><li>- role of interest teams</li><li>- goals/policies/action items</li></ul>	Darren Wyss
7:20 – 8:20	Building Block/Policy Discussion Overview Discussion: <ul style="list-style-type: none"><li>- additions</li><li>- changes</li><li>- deletions</li><li>- evaluation exercise</li></ul>	Darren Wyss All
8:20 – 8:50	Action Measure Discussion	All
8:50 – 9:00	Closing Comments Adjourn	Darren Wyss



## **Policy Interest Team Roles and Responsibilities**

May 22, 2007

Thank you for volunteering to help the City of Tigard define important aspects of our draft Comprehensive Plan policies. When adopted, the Comprehensive Plan will guide our community's planning, actions and investments over the next 20 years. The Comprehensive Plan sets policy direction for the City and should reflect the community's values.

As you will see by our agenda, we have a lot to cover in the meetings we have scheduled. The meetings will be facilitated by City staff. We are eager to hear from all of you. Through the course of our work, please adhere to the following:

- ◆ Attend all meetings. If you are unable to attend, send your comments to staff in advance of the meeting.
- ◆ Review material provided in advance of the meeting.
- ◆ Ask questions for information or clarification, not to challenge or intimidate.
- ◆ Consider all opinions as valid and worthy of respect.
- ◆ Be willing to learn, compromise and/or negotiate.
- ◆ Aim for a consensus that is fair and in the best interest of the community.

# Environmental Quality Policy Building Blocks

**GOAL**

**4.1 Reduce air pollution and improve air quality in the community and region.**

**POLICY BUILDING BLOCKS:**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>The Clean Air Act outlines specific air quality standards that must be met.</b>	<ul style="list-style-type: none"><li>▪ It is the responsibility of the City to verify land use compliance before DEQ issues Air Contaminant Discharge Permits or Title V Operating Permits.</li><li>▪ The City issues land use and building permits for development.</li><li>▪ The City is responsible for land use planning and its affect on air quality.</li></ul>

Assembled Policy (draft):

**4.1.1 The City shall ensure that all development complies with or exceeds regional, state, and federal standards for air quality.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Air quality is a regional issue that must be addressed on a regional level.</b>	<ul style="list-style-type: none"><li>▪ DEQ develops carbon monoxide and ozone maintenance plans for the Portland Metro region.</li><li>▪ Transportation planning can have the greatest impact on air quality.</li><li>▪ The Motor Vehicle Inspection Program, Employee Commute Options Program, and the Industrial Emissions Management Program are elements of DEQ plans.</li></ul>

Assembled Policy (draft):

**4.1.2 The City shall support regional and state plans and programs to attain regional, state, and federal standards for air quality.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<p><b>Motor vehicles are now the primary source of air pollution in Oregon.</b></p>	<ul style="list-style-type: none"> <li>▪ Land use patterns can have an impact on vehicle miles traveled and the associated impacts on air quality.</li> <li>▪ Mixed use zoning can encourage working, living, and shopping in the same neighborhood.</li> <li>▪ Increased density along major public transit routes can reduce automobile trips.</li> <li>▪ Compatibility between new and existing development is a value expressed by the community through surveys in the past five years.</li> <li>▪ Connected bicycle and pedestrian infrastructure can encourage more biking and walking from residents.</li> </ul>

Assembled Policy (draft):

4.1.3      **The City shall promote land use patterns which reduce dependency on the automobile, are compatible with existing neighborhoods, and increase opportunities for walking, biking, and/or public transit.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<p><b>The City can directly impact air quality through municipal operations.</b></p>	<ul style="list-style-type: none"> <li>▪ Hybrid vehicles emit less pollution than conventional vehicles.</li> <li>▪ Alternative fuels produce can produce less pollution than petroleum based fuels.</li> <li>▪ Encourage employees to use alternative forms of transportation through incentives.</li> <li>▪ Research and implement technologies to reduce emissions.</li> </ul>

Assembled Policy (draft):

4.1.4      **The City shall continue to investigate and implement practices that reduce air pollution associated with municipal operations.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<p><b>Congestion causes localized air quality problems.</b></p>	<ul style="list-style-type: none"> <li>▪ The Metro Regional Transportation Plan allocates funding for transportation projects.</li> <li>▪ A number of highways under ODOT jurisdiction either cross through or border the City of Tigard.</li> <li>▪ A number of alternatives exist (access management, intersection improvements, and intelligent transportation systems) for reducing congestion, which can help in improving air quality.</li> </ul>

Assembled Policy (draft):

4.1.5      **The City shall cooperate with other public agencies to minimize localized transportation impacts to air quality through intersection improvements, access management, intelligent transportation systems, etc.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Vegetation can help to improve air quality through the conversion of carbon dioxide to oxygen.</b>	<ul style="list-style-type: none"><li>▪ Photosynthesis removes carbon dioxide from the air.</li><li>▪ Carbon Dioxide is a greenhouse gas.</li><li>▪ Tigard citizens have indicated their preference for protection of open space and natural resources through community surveys.</li></ul>

Assembled Policy (draft):

**4.1.6      The City shall encourage the maintenance and improvement of open spaces, natural resources, and the City’s tree canopy to sustain their positive contribution to air quality.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Noise and light are forms of air pollution in the community.</b>	<ul style="list-style-type: none"><li>▪ The City has adopted environmental performance measures in the municipal code.</li><li>▪ The City has enforced noise standards since DEQ eliminated its noise program in 1991</li><li>▪ DEQ defines noise as a pollutant and various standards have been established to protect public welfare.</li></ul>

Assembled Policy (draft):

**4.1.7      The City shall continue to maintain environmental performance measures to minimize impacts from noise and light pollution.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Household pollutants can negatively impact the air quality of the community.</b>	<ul style="list-style-type: none"><li>▪ Wood burning fireplaces, which are permitted and inspected by the City, emit fine particulate matter into the air.</li><li>▪ Gasoline-powered lawn and garden equipment emit ozone, carbon monoxide, and carbon dioxide.</li><li>▪ The City does not currently have a policy regarding household pollutants. Most jurisdictions use education to address impacts on community air quality.</li></ul>

Assembled Policy (draft):

**4.1.8      The City shall encourage citizens to modify their household actions to reduce emissions. This may include alternatives for heating, lawn and garden equipment, and transportation.**

# Environmental Quality Policy Building Blocks

**GOAL**

**4.2 Ensure land use activities protect and enhance the community’s water quality.**

**POLICY BUILDING BLOCKS:**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>The Clean Water Act outlines specific water quality standards that must be met.</b>	<ul style="list-style-type: none"><li>▪ It is the responsibility of the City to ensure development complies with water quality standards.</li><li>▪ The City issues land use and building permits for development.</li><li>▪ The City is responsible for land use planning and its affect on water quality.</li></ul>

Assembled Policy (draft):

**4.2.1 The City shall ensure that all development complies with or exceeds regional, state, and federal standards for water quality.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Water quality is a basin-wide issue that should be addressed in that manner.</b>	<ul style="list-style-type: none"><li>▪ Clean Water Services (CWS) holds the NPDES permits for the Tualatin River basin.</li><li>▪ CWS is responsible for submitting Stormwater and Wastewater management plans to DEQ for compliance with the Clean Water Act.</li><li>▪ Tigard is a co-implementer of the NPDES permits and associated plans.</li><li>▪ CWS Design and Construction Standards have been developed and must be applied within the Tualatin River basin.</li></ul>

Assembled Policy (draft):

**4.2.2 The City shall continue cooperation with federal, state, and regional agencies in the management of Tigard’s water resources and the implementation of plans and programs.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Impervious surfaces have a significant impact on water quality.</b>	<ul style="list-style-type: none"><li>▪ They collect pollutants and toxins that run-off into the stormwater system.</li><li>▪ They increase the peak flow of storm events.</li><li>▪ Natural filtration can keep pollutants out of surface water and act to balance the timing of the release of rain into the system.</li><li>▪ Increasing peak flows causes erosion.</li></ul>

Assembled Policy (draft):

**4.2.3      The City shall limit unnecessary increases in the percentage of Tigard’s impervious surfaces.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Stream channel and riparian restoration are activities that can contribute to improved water quality.</b>	<ul style="list-style-type: none"><li>▪ Native vegetation filters nutrients and provides shade, structure, and food sources to streams.</li><li>▪ Trees outside the riparian corridor provide interception and evapotranspiration to reduce stormwater run-off.</li><li>▪ Proper wetland and floodplain function filters pollutants out of the surface water system.</li><li>▪ Meandering channels and large woody debris promote over bank flow and floodplain function.</li><li>▪ Repairing culverts and catch basins can improve water quality.</li></ul>

Assembled Policy (draft):

**4.2.4      The City shall protect, restore, and enhance, to the extent practical, the natural functions of stream corridors, trees, and water resources for their positive contribution to water quality.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Development impacts water quality through erosion and stormwater run-off.</b>	<ul style="list-style-type: none"><li>▪ New developments over one acre are required to secure a permit from DEQ.</li><li>▪ The City acts as permit agents for erosion and sediment control during construction activities.</li><li>▪ Minimum landscaping requirements can reduce run-off after construction is complete.</li><li>▪ Bio-swales and other green treatments can reduce erosion and run-off.</li></ul>

Assembled Policy (draft):

**4.2.5      The City shall implement measures to minimize erosion and storm run-off from development sites during and after construction.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Personal non-point source pollution is difficult to regulate.</b>	<ul style="list-style-type: none"><li>▪ Personal fertilizers and pesticides require no training for their purchase and use.</li><li>▪ Bacteria from animal waste, particularly canine, are problematic in the Fanno Creek basin.</li><li>▪ Properly functioning vehicles and reduced trips can help to keep toxic pollutants out of run-off.</li><li>▪ Toxic products, like paint, must be disposed of properly to keep them out of the surface water system.</li><li>▪ Low impact development and green building techniques can help to improve water quality.</li><li>▪ Clean Water Services maintains a public outreach and education program.</li></ul>

Assembled Policy (draft):

**4.2.6      The City shall continue to collaborate on educating the public of techniques and practices private individuals can employ to help correct water quality issues.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Green street concepts are a natural alternative to stormwater management.</b>	<ul style="list-style-type: none"><li>▪ Bio-swales and vegetation help to filter pollutants from street run-off.</li><li>▪ Green street concepts can help to slow and minimize the peak storm flow.</li><li>▪ The City is going to apply these concepts to the reconstruction of Burnham and Main Streets.</li><li>▪ Not all areas are conducive to green street concepts because of topography, soil type, and land use intensity.</li></ul>

Assembled Policy (draft):

**4.2.7      The City shall investigate and use, to the extent practical, green street concepts to construct new streets, or retrofit existing streets.**



<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>Leaking septic tanks can lead to water quality problems.</b>	<ul style="list-style-type: none"><li>▪ The City provides sewer service to areas inside the city limits.</li><li>▪ Some neighborhoods within the city limits do not have sewer service.</li><li>▪ The City implements a program to get neighborhoods connected to the sanitary sewer provided they pay their fair share.</li></ul>

Assembled Policy (draft):

- 4.2.8

**The City shall continue to facilitate the extension of the City’s wastewater system to neighborhoods without service within the Tigard Urban Service Area, provided:**
- A.

**Properties benefiting from the extension pay their fair share of the cost; and**
- B.

**Annexation occurs prior to any property receiving service.**

# Environmental Quality Policy Building Blocks

**GOAL**

**4.3 Reduce the amount of solid waste entering landfills.**

**POLICY BUILDING BLOCKS:**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Metro develops the Regional Solid Waste Management Plan (RSWMP) for the Metro wasteshed.</b>	<ul style="list-style-type: none"><li>▪ Tigard is a member of the Metro wasteshed and collaborates in the development of the RSWMP.</li><li>▪ The RSWMP fulfills state requirements for a waste reduction plan.</li><li>▪ The RSWMP addresses population growth impacts and plans for landfill capacity in the future.</li><li>▪ The City implements the plan through the Washington County Cooperative.</li></ul>

Assembled Policy (draft):

**4.3.1      The City shall continue collaborating with federal, state, and regional agencies in the development and implementation of solid waste management plans and programs.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>The City does not own or operated a solid waste or recycling collection service.</b>	<ul style="list-style-type: none"><li>▪ The City enters into franchise agreements to ensure compliance with the RSWMP.</li><li>▪ Franchise agreements ensure recycling opportunities are accessible to all households, businesses, and institutions.</li><li>▪ The franchise agreements use prevention and recovery efforts to reduce waste.</li><li>▪ The City must ensure services are cost effective and environmentally sensitive.</li></ul>

Assembled Policy (draft):

**4.3.2      The City shall regulate and manage solid waste and recycling collection services through franchise agreements that:**

- A.      Ensure recycling opportunities are accessible to all households, businesses, and institutions;**
- B.      Implement waste reduction measures through prevention and recovery efforts;**
- C.      Remain cost effective and environmentally sensitive; and**
- D.      Comply with applicable plans, policies, and laws.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Hazardous waste must be managed appropriately to limit contamination.</b>	<ul style="list-style-type: none"><li>▪ Oregon DEQ regulates hazardous waste in the state.</li><li>▪ DEQ administers permitting, collection, disposal, and cleanup programs.</li><li>▪ Hazardous waste permits range from retail paint stores to light manufacturers.</li><li>▪ Cleanup of hazardous waste sites is very important to ensure the community’s land resources are free of contamination.</li></ul>

Assembled Policy (draft):

**4.3.3      The City shall collaborate with the appropriate agencies to ensure proper permitting, collection, disposal, and cleanup of hazardous wastes.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Public education is an important component of waste reduction and proper disposal.</b>	<ul style="list-style-type: none"><li>▪ Household recycling, composting, and reuse are not regulated, but are good opportunities to reduce waste.</li><li>▪ Household hazardous wastes (cleaning products, paint, gasoline, etc.) are not regulated and are targeted as educational programs in DEQ and Metro plans.</li><li>▪ Construction and business activities have been identified as two areas with significant room for improvement in recycling and neither are regulated at this time.</li></ul>

Assembled Policy (draft):

**4.3.4      The City shall use public education to promote:**

**A.      Opportunities for recycling, composting, and reuse;**

**B.      Reduction of household hazardous waste and its proper disposal; and**

**C.      Reduction of solid waste generated from construction and business activities.**

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>The City can lead by example in reducing solid waste.</b>	<ul style="list-style-type: none"><li>▪ Municipal operations generate a fair amount of solid waste.</li><li>▪ Purchasing recycled, resource efficient, and durable materials will decrease the City’s impact on solid waste disposal.</li><li>▪ In-house recycling programs can have a great impact on municipal solid waste generation.</li></ul>

Assembled Policy (draft):

**4.3.5      The City shall reduce the amount of solid waste associated with municipal operations.**

# Environmental Quality Policy Building Blocks

**GOAL**

**4.4 Reduce energy consumption.**

**POLICY BUILDING BLOCKS:**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>The largest consumption of energy in the state is by the transportation sector.</b>	<ul style="list-style-type: none"><li>▪ The City can help to reduce vehicle miles traveled through land use patterns that reduce dependency on the automobile (mixed use and neighborhood commercial and high density along transit corridors).</li><li>▪ Public transit is one solution in reducing vehicle miles traveled if it is reliable, connected, and efficient.</li><li>▪ Bicycles and walking can help reduce vehicle miles traveled if infrastructure is in place that is connected and safe.</li></ul>

Assembled Policy (draft):

- 4.4.1 The City shall promote the reduction of energy consumption associated with vehicle miles traveled through:**
- A. Land use patterns that reduce dependency on the automobile;**
  - B. Public transit that is reliable, connected, and efficient; and**
  - C. Bicycle and pedestrian infrastructure that is safe and well connected.**

<u>Policy Principle (Cornerstone) :</u>	<u>Other Building Blocks (actions and results)</u>
<b>Oregon Dept. of Energy has taken the lead on energy planning in the state.</b>	<ul style="list-style-type: none"><li>▪ The Oregon Energy Plan is updated every biennium and includes an action plan to meet the goals.</li><li>▪ Regional transportation planning can have great impact on energy consumption.</li><li>▪ The state manages education and incentive programs for energy conservation.</li></ul>

Assembled Policy (draft):

- 4.4.2 The City shall implement regional and state regulations, plans, and programs that promote energy conservation.**

<u>Policy Principle (Cornerstone) :</u>  <b>Alternative site designs during development can help reduce energy demand.</b>	<u>Other Building Blocks (actions and results)</u>  <ul style="list-style-type: none"> <li>▪ Topography, vegetation, and solar access are attributes that can be used proactively to reduce energy demand.</li> <li>▪ Heating, cooling, and lighting needs are impacted by site design.</li> <li>▪ The City issues land use permits, reviews building plans and issues building permits within the city limits.</li> </ul>
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Assembled Policy (draft):

**4.4.3      The City shall require future development to consider topography, vegetation, and solar access during the design phase to reduce demands for artificial heating, cooling, and lighting.**

<u>Policy Principle (Cornerstone) :</u>  <b>A building’s energy efficiency is an important component of reducing energy consumption.</b>	<u>Other Building Blocks (actions and results)</u>  <ul style="list-style-type: none"> <li>▪ The state regulates energy efficiency standards through the Oregon Residential Specialty Code.</li> </ul>
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Assembled Policy (draft):

**4.4.4      The City shall implement and enforce state energy efficiency standards during the building permit review process.**

<u>Policy Principle (Cornerstone):</u>  <b>The City can lead by example and reduce municipal energy consumption.</b>	<u>Other Building Blocks (actions and results)</u>  <ul style="list-style-type: none"> <li>▪ Design and develop public facilities to use alternative energy sources and conserve energy in operations.</li> <li>▪ Energy audits are a mechanism for improving energy efficiency in existing public facilities.</li> <li>▪ Green energy programs use only renewable energy resources.</li> <li>▪ New technologies can help reduce municipal energy consumption.</li> <li>▪ Encourage employees to use alternative transportation through incentives.</li> </ul>
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Assembled Policy (draft):

**4.4.5      The City shall take a leadership role in local energy matters by:**

**A.      Designing and developing public facilities, wherever possible, that take advantage of alternative energy sources and conserve energy in operations;**

- B. Conducting energy audits on existing City facilities and implementing cost-effective recommendations as soon as possible;
- C. Participating in green energy programs, which only use renewable energy resources; and
- D. Continuing to investigate new technologies that can reduce municipal energy consumption.

<u>Policy Principle (Cornerstone):</u>	<u>Other Building Blocks (actions and results)</u>
<b>The City can support conservation through education and incentives.</b>	<ul style="list-style-type: none"><li>▪ Encourage Leadership in Energy and Environmental Design (LEED) certification for new developments.</li><li>▪ Educate the public about energy efficient appliances, alternative energy sources, weatherization, and other personal actions that can be taken to reduce energy consumption.</li><li>▪ Provide flexibility in the land use process to take advantage of solar radiation</li><li>▪ Develop incentives for private sector development to use energy efficient materials and appliances, and other energy conservation efforts.</li></ul>

Assembled Policy (draft):

**4.4.6 The City shall support energy conservation by:**

- A. Encouraging designs that achieve a minimum Leadership in Energy and Environmental Design (LEED) certification;
- B. Educating the public about personal actions that can be taken to improve energy efficiency and reduce energy consumption;
- C. Developing incentives programs for private sector development, where feasible; and
- D. Providing flexibility in the land use process to take advantage of solar radiation.



**Environmental Quality Draft Action Measures**  
June 18, 2007

- 4.1.a Perform a land use analysis to identify residential zones that could potentially accommodate mixed use or neighborhood commercial development.
- 4.1.b Adopt and implement development regulations that include provisions or incentives for alternative transportation use, particularly in Metro designated corridors and centers.
- 4.1.c Perform a sidewalk inventory that results in a city-wide GIS layer to be used for gap analysis and the creation of a sidewalk improvement plan.
- 4.1.d Work with TriMet to identify underserved neighborhoods and find the funding to add service in these areas.
- 4.1.e Pursue funding for transportation related projects that would reduce congestion.
- 4.1.f Expand the free street tree program by actively engaging neighborhoods and creating a pool of community volunteers to help with the plantings.
- 4.1.g Place educational materials in the Tigard Public Library and City Hall that demonstrate actions individuals can implement to help improve air quality in the community.
- 4.2.a Research and implement incentives that encourage development to minimize impervious surface coverage.
- 4.2.b Continue to implement the CWS Healthy Streams Plan.
- 4.2.c Work with the Tree Board to develop an urban tree stewardship program that increases the canopy cover in Tigard.
- 4.2.d Inventory outfalls from non-treated stormwater systems and identify alternatives for improving the water quality released from them.
- 4.2.e Purchase properties located within the 100-year floodplain and develop a management plan that will allow for their natural function in removing pollutants from the stream system.
- 4.3.a Find long-term partners and plan a yearly E-Waste Collection Event similar to the one in September 2006.

- 4.3.b Start a composting program (including education) for City employees that includes the purchasing of compostable plates, utensils, and cups.
- 4.3.c Research commercial and construction recycling programs that could be implemented in Tigard.
- 4.4.d Develop and maintain a GIS database of DEQ hazardous waste permit sites and hazardous cleanup sites.
- 4.4.a Create a process that requires new development to consider topography, vegetation, and solar access during the design phase.
- 4.4.b Develop target decreases for energy consumption associated with municipal operations.
- 4.4.c Implement the City's *Five Year Strategic Resource Management Plan*.
- 4.4.d Purchase a percentage of Green Energy for municipal operations and then challenge the community to do the same.
- 4.4.e Research incentives and development codes that would encourage energy efficiency in new developments.